

Polypropylene

Fibremod™ GD577SF

Polypropylene Compound, Glass Fibre Reinforced

Description

Fibremod™ GD577SF is a 50 % chemically coupled high performance glass fibre reinforced polypropylene compound intended for injection moulding.

This material has an excellent stiffness combined with good surface quality.

Applications

Fibremod GD577SF has been developed especially for applications like:

Structural parts	Clutch and gas pedal
Front end carriers	Cross beams
Battery supports	

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	1350 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	3 g/10min	ISO 1133
Tensile Modulus (1 mm/min)	13.500 MPa	ISO 527-2
Tensile Strength	160 MPa	ISO 527-2
Heat Deflection Temperature A	157 °C	ISO 75-2
Charpy Impact Strength, notched (23 °C)	11 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, unnotched (23 °C)	55 kJ/m ²	ISO 179/1eU
Spiral flow length (230°C, 40°C, 600bar)	470 mm	Borealis Test Method

Values determined on standard injection moulded specimens conditioned at 23°C and 50% relative humidity after at least 96 hours storage time. Specimens are produced within the ISO standards but with special moulding conditions (injection moulding runner and cavity design, melt temperature and dynamic pressure) required for highly filled PP-SGF materials and used generally in part production.

Processing Techniques

The actual conditions will depend on the type of equipment used.

Injection Moulding

To avoid residual humidity from transport or storage, the material should be pre-dried approximately 2h at 80°C. This product is easy to process with standard injection moulding machines. Following moulding parameters should be used as guidelines:

Feeding temperature	40 - 80 °C
Mass temperature	220 - 260 °C
Back pressure	Low to medium
Holding pressure	30 - 60 bar
Mould temperature	30 - 60 °C
Screw speed	Low to medium
Flow front speed	100 - 200 m/min

Storage

Fibremod GD577SF should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.

Fibremod is a trademark of the Borealis group.

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Safety

Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of safety, recovery and disposal of the product. For more information, contact your Borealis representative.

Recycling

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of recovery and disposal of the product.

Regional Availability

Europe

North America: grade available under the name GD577SFU

South America: grade available under the name GD577SFB

For information on regional availability please contact Borealis Sales Representative.

Issuer:

Marketing Automotive / Daniel Bahls

Product Management / Erwin Kastner

Disclaimer

The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.

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